1. (twice amended) A method of chemical compound storage, comprising:

(a) providing a longitudinally extending carrier tape having therein [a plurality] two or more matrices of thermoformed chemical receiving wells; and simultaneously adding to each of said chemical receiving wells in one of said two or more matrices a chemical compound.

2. (amended) A method of chemical compound storage, as defined in Claim 1, further comprising: simultaneously placing a liquid tight sealing material [over] around each of said chemical receiving wells in one of said two or more matrices to retain said chemical compounds therein and to minimize evaporation.

3. (twice amended) 3. A method of chemical compound storage, as defined in Claim 2, further comprising: forming said carrier tape into a compact roll for storage, said roll having about 100,000 aliquots and dimensions of about [four] 16 inches [wide] in diameter by [16] four inches [long] wide.

7. (amended) A method of chemical compound storage, as defined in Claim 1, further comprising: providing said chemical receiving wells in [repetitive matrixes] said two or more matrices selected from the group consisting of 8x12 wells with a spacing of 9mm between centers, 16x24 wells with a spacing of 4.5mm between centers, and 32x48 wells with a spacing of 2.25mm between centers.

8. (amended) A method of chemical compound storage, as defined in Claim 7, further comprising: providing each of said repetitive [matrixes] matrices with a unique identifier.

9. (twice amended) A method of chemical compound storage, as defined in Claim 2, further comprising: providing said sealing material with a pressure sensitive adhesive to adhere said sealing material to said carrier tape to permit removal of said sealing material after adhesion to said carrier tape by pulling said sealing material from said carrier tape without the use of a knife structure.

10. (twice amended) A method of chemical compound storage, as defined in Claim 2, further comprising: providing said sealing material removably heat sealed to said carrier tape to permit removal of said sealing material after being sealed to said carrier tape by pulling said sealing material from said carrier tape without the use of a knife structure.

15. (twice amended) A method of chemical compound storage, as defined in Claim 2, further comprising:

(a) perforating said carrier tape with holes between said chemical receiving wells, said holes being disposed near upper edges of said chemical receiving wells; and

(b) evacuating space between said seal material and said carrier tape at time of sealing through said holes to assure an intimate leak tight seal is achieved between said seal material and said carrier tape.

16. (amended) A method of chemical compound storage, as defined in Claim 2, further comprising: die cutting said sealing material around [a pattern] one of said two or more matrices of said chemical receiving wells to allow manual removal of said sealing material from said pattern of said chemical receiving wells.

18. (amended) A method of chemical compound storage, as defined in Claim 1, further comprising: severing individual [patterns] said two or more matrices of said chemical receiving wells from said carrier tape so that said individual [patterns] said two or more matrices can be used independently.

21. (twice amended) A device for chemical compound storage, comprising: a longitudinally extending carrier tape having therein a plurality of thermoformed chemical receiving wells, said chemical wells being disposed in two or more matrices on said carrier tape.

22. (amended) A device for chemical compound storage, as defined in Claim 21, further comprising: a liquid tight sealing material disposed [over said] around each of said thermoformed chemical receiving wells to retain said chemical compounds therein and to minimize evaporation.

23. (amended) A device for chemical compound storage, as defined in Claim 22, wherein: said carrier tape is formable into a compact roll for storage, said roll having about 100,000 aliquots and dimensions of about [four] 16 inches [wide] in diameter by [16] four inches [long] wide.

30. (amended) A method of chemical compound storage, as defined in Claim 1, further comprising: indexing [repetitive patterns] said two or more matrices of said thermoformed chemical receiving wells using a tractor drive.